Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
Central Regional Office • 8 New Bond Street, Worcester MA 01606 • 508-792-7650

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

AIR QUALITY OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("Department" or "MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

ISSUED TO ["the Permittee"]:
Polyfoam Corp.
2355 Providence Road
P.O. Box 906
Northbridge, MA 01534

INFORMATION RELIED UPON:
Application No. X258445
Transmittal No. X239067-A1

FACILITY LOCATION:
2355 Providence Road
Northbridge, MA 01534

FACILITY IDENTIFYING NUMBERS:
AQ ID: 1180303
FMF FAC NO.: 134269
FMF RO NO.:161407

NATURE OF BUSINESS:
Expanded Polystyrene Shape Molding

Standard Industrial Classification (SIC):
3086

North American Industrial Classification System (NAICS): 326140- Polystyrene Foam Products Manufacturing

RESPONSIBLE OFFICIAL:
Name: Mr. Thomas Coz
Title: President

FACILITY CONTACT PERSON:
Name: Tom Flynn
Phone:508.234.6323
Email: TFlynn@polyfoamcorp.com

This Operating Permit shall expire on November 3, 2022.

For the Department of Environmental Protection

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

November 3, 2017

Roseanna E. Stanley, Bureau of Air and Waste — Date

TABLE OF CONTENTS

SPECIAL CONDITIONS FOR OPERATING PERMIT

1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this Permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this Permit.

A. DESCRIPTION OF FACILITY AND OPERATIONS

Polyfoam Corp. ("Polyfoam") utilizes Expandable Polystyrene ("EPS") beads containing pentane gas as a blowing agent to manufacture custom shape molded foam containers for packing, shipping, and thermal insulating applications. The majority of the bead used in manufacturing contains between 3.0% and 6.2% pentane. On September 15, 2011, a Federal Consent Decree No. 4:11-cv40 134 GAO (the "CD") and Final Judgment was executed by the United States of America on behalf of the EPA against Polyfoam. EPA alleged that Polyfoam committed violations of the New Source Review ("NSR") requirements, Title V operating permit requirements, and federally enforceable state air quality requirements. The CD established an emission rate of less than or equal to 2.4 pounds of VOC released per 100 pounds of EPS bead processed ("2.4 lb VOC/100 lb EPS") averaged over 24 hours for the manufacturing (EU1) and post-manufacturing (EU2) (up to the first 48 hours after manufacture) processes. Plan Approval X239067-A1 restricts the total facility pentane emissions to 2.4 pounds volatile organic compound per 100 pounds of expandable polystyrene bead (lb VOC/100 lb EPS) to include the long term storage from day 3 to day 28 (EU3) . This VOC limit established Best Available Control Technology ("BACT") as it applies to this industry. Annual pentane emissions are restricted to 72 tons per year from the entire manufacturing process including uncontrolled (fugitive) pentane emissions generated from the post manufacturing storage areas.

Beads are pneumatically conveyed to expanders where they are pre-expanded with steam. The resulting pre-puff is transferred and allowed to age in 30 mesh bags for up to 48 hours. After aging, pre-puff foam material is conveyed to individual vacuum assisted molding machines where it is fused in the molds under heat and pressure. Finished molded parts are removed from the machines and may be stored in long term storage. The long term storage for purposes of the EU designation is between 3-28 days.

Pentane emissions generated from the pre-expansion, pre-puff aging and molding of EPS are captured and then controlled by a regenerative thermal oxidizer (RTO) equipped with a puff capture package and installed in 2013. The design of the capture and control system for pentane emissions includes 'dry' and 'wet' streams. Dry stream pentane emissions are generated at the fluid bed dryer, drop chute hood, hopper vents and raw bead vacuum pumps and are directed to the bead aging room, which serves as a central collection point for the dry-side collection system. The aging room contains several large mesh aging bags and is maintained under negative pressure and controlled by the RTO. Wet stream pentane emissions are a steam and air mixture evacuated from the pre- expanders operating under a vacuum. The wet stream is filtered, condensed, cooled and diluted with a dry slip stream prior to being ducted and destroyed by the RTO. Capture of pentane emissions from bead manufacturing is estimated to be an average of greater than 87.5% by mass and subject to verification. The destruction of VOC is greater than or equal to 99% efficiency. Polyfoam is limited to a total of 20 molding machines.

Polyfoam is subject to the Operating Permit Program pursuant to 310 CMR 7.00: Appendix C(2) since the Facility has the potential to emit 50 tons per year or greater of Volatile Organic Compounds ("VOC") consisting primarily of pentane emissions. Compliance Assurance Monitoring ("CAM") pursuant to 40 CFR 64 applies to manufacturing (EU1) at the Facility because it utilizes air pollution control equipment to control VOCs. The CAM Monitoring approach is contained within Tables 4, 4A, 4B, 5 and 6. The Facility emits less than one ton per year (tpy) of hazardous air pollutants ("HAP") from the combustion of natural gas in the two boilers and the RTO.

Two natural gas boilers (EUs 4 and 5) provide steam for the bead expansion process. One boiler (EU4) is a Cleaver Brooks boiler rated at 10 million British thermal units per hour (MMBtu/hour) was installed February 9, 2001. The other (EU5) is a York Shipley boiler rated at 7.5 MM Btu/hour and was installed June 1, 1977. These boilers are not subject to 40 CFR 63 subpart JJJJJJ (6J) because they use only natural gas fuel and are therefore exempt from the federal regulation. The Cleaver Brooks boiler is subject to 40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial –Commercial-Institutional Steam Generating Units because it equal to or greater then 10MMBtu/hr and was constructed after June 9, 1989 (applicability date). The Cleaver Brooks boiler is required to record and maintain records of the amount of fuel combusted during each calendar month under 40 CFR 60.48c(g)(2).

A spark ignited Generac emergency generator (EU6) rated at 7.5KW combusts propane and is subject to 40 CFR 60 Subpart ZZZZ, but by meeting 40 CFR 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Combustion Engines (SI ICE), no further National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements apply in accordance with 63.6590(c).

The Permittee is subject to the requirements of Greenhouse Gas Emissions Reporting as defined by MassDEP in 310 CMR 7.71(3)(a). Pursuant to 310 CMR 7.71(2) *Definitions:*

> Greenhouse Gas means any chemical or physical substance that is emitted into the air and that MassDEP may reasonably anticipate will cause or contribute to climate change including, but not limited to, Carbon Dioxide (CO_2) , Methane (CH_4), Nitrous Oxide (N_2O), Sulfur Hexafluoride (SF_6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).

2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this Operating Permit:

Table 1

EU	Description of EU	EU Design Capacity	Pollution Control Device
1	Manufacturing: • (2) **Pre-Expansion (expander) :** (1) Kurtz and (1) Hirsch, • **Pre- Puff Aging** (30 mesh aging bags), and • **Molding** (20 vacuum assisted machines)	Capacity of the expander is dependent on the density of the expanded 'pre-puff': High density material: ex. 2 pound per ft^3 processed at about 1,500 pounds per hour. Low density material: ex. 0.75 pounds per ft^3 processed at about 750 pounds per hour. Maximum combined capacity of the two expanders based on actual densities utilized is 2000 pounds per hour	TANN Langbein Engelbracht America model # TR692C Regenerative Thermal Oxidizer (RTO) • rated at 6,000 scfm • ≥ 99% VOC destruction efficiency • Equipped with puff capture package • Random packed ceramic saddle media • Noise abatement enclosure • Equipped with a "carbon flywheel" (wet stream) • 1,500,000 Btu/hr (Maxon full modulating burner or equivalent) Capture of pentane emissions from bead manufacturing i.e. pre-expansion, aging and molding was determined to have an average efficiency of 87.5% by mass, subject to verification during performance testing using EPA approved methodologies.
2	Post –Manufacturing: finished product storage for a maximum of 48 hours after manufacturing	NA	None
3	Long term storage occurring after the initial 48 hours of final product storage (from day 3 to day 28). Assuming between 11-26% of the original pentane content remains in product when shipped.	NA	None
4	Cleaver Brooks natural gas process boiler that provide bead expansion steam	10,200,000 Btu/hr	None
5	York Shipley natural gas process boiler that provide bead expansion steam	7,500,000 Btu/hr	

Table 1			
EU	**Description of EU**	**EU Design Capacity**	**Pollution Control Device**
6	Generac propane emergency generator (432 cc displacement)	7.5 kW (10 hp)	none

Table 1 Key

Btu/hr = British thermal units per hour
cc = cubic centimeters
EPA = Environmental Protection Agency
EU = Emission Unit
ex. = example
ft^3 = cubic feet
hp = horsepower
kW = kilowatt
NA= Not applicable
RTO= Regenerative Thermal Oxidizer
scfm= standard cubic feet per minute
% = percent
≥ = greater than or equal to

3. IDENTIFICATION OF EXEMPT ACTIVITIES

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2	
Description of Current Exempt Activities	**Reason**
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the Permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00:Appendix C(5)(h)

4. APPLICABLE REQUIREMENTS

A. OPERATIONAL AND/OR PRODUCTION EMISSION LIMITS AND RESTRICTIONS

The Permittee is subject to the limits/restrictions as contained in Table 3 below:

Table 3

EU	Fuel/Raw Material	Operational and/or Production Limits	Pollutant	Emissions Limits/Standards	Applicable Regulation and/or Approval No
1	EPS bead	1. The aging room shall operate under negative air pressure to ensure approximately 98% by weight capture of VOC emissions	VOC	99% by weight or better VOC destruction efficiency	X239067-A1
		2. The Dry Stream Pentane Emissions shall be exhausted to the aging room enclosure.			
		3. Regenerative Thermal Oxidizer (RTO) shall operate whenever $\geq$ 500 pounds EPS material is in the aging room		See EU 1-3	
		4. Equipment that captures pentane emissions from bead manufacturing i.e. pre-expansion, aging and molding is assumed to have an efficiency of 87.5% by weight.			
		5. Maximum air flow $\leq$ 6000 scfm to the RTO			
1-3	EPS bead	None	VOC	$\leq$ 2.4 pounds VOCs per 100 pounds EPS beads processed, calculated on a daily [1]average [2], 8 TPM [3], and 72 TPY [4]	X239067-A1
4 and 5	Natural gas	None	NO_x [5]	7.75 TPY	X239067-A1 40 CFR 60 Dc for EU 4
			SO_2 [5]	0.05 TPY	
			PM [5]	0.59 TPY	
			CO [5]	6.51 TPY	
			VOC [5]	0.43 TPY	
			opacity	0%	

Table 3					
EU	**Fuel/Raw Material**	**Operational and/or Production Limits**	**Pollutant**	**Emissions Limits/Standards**	**Applicable Regulation and/or Approval No**
6	Propane			Engine is certified by the manufacturer as meeting emission standards. The certified engine must be operated and maintained according to the manufacturer's emission related written instructions.	40 CFR 60 subpart JJJJ 40 CFR 60.4233(a)
Facility-wide	All	None	VOC	72.43 TPY [4]	X239067-A1
			Greenhouse Gas [6]	NA	310 CMR 7.71 (State Only Requirement)
			HAP [7]	Less than 1 ton per year	Transmittal No. X258445
			Opacity	0%	

Table 3 Key:

% = percent
≤ = less than or equal to
≥ = greater than or equal to
CO = Carbon Monoxide
EPS= expandable polystyrene
EU = Emission Unit
HAP = Hazardous Air Pollutant
NA = Not Applicable
NO_x = Nitrogen Oxides
PM = Total Particulate Matter
RTO= Regenerative Thermal Oxidizer
scfm = standard cubic feet per minute
SO_2 = Sulfur Dioxide
TPM = tons per calendar month
TPY = tons per consecutive 12-month period
VOC = Volatile Organic Compound

Table 3 Foot Notes:

1. "Daily" shall mean a continuous 24-hour period commencing at 7 a.m.
2. The Permittee shall calculate the Daily Average in accordance with the methodology specified in Attachment A of the Plan Approval, X239067-A1.
3. Monthly VOC emissions shall be based on consecutive 30 day period
4. To calculate the Annual VOC emissions take the current calendar month amount and add it to the previous 11 calendar months total amount.
5. Annual combustion emissions are based on AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, lb pollutant/MMscf per year maximum potential fuel usage (2 boilers = 17,700,000 Btu/hr input/ 1000 scf per MM Btu/scf= 17,700 scf / hr input)
   Potential fuel usage based on both boilers running: 8760 hours/yr x 17,700 scf/hr = 155 x 10^6 scf/yr
6. Greenhouse Gas means any chemical or physical substance that is emitted into the air and that the department may reasonably anticipate will cause or contribute to climate change including, but not limited to, Carbon dioxide (CO_2), methane (CH_4), nitrous oxide, sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).
7. The combustion of natural gas in the two process boilers and in the RTO and propane in the emergency generator results in HAP emissions.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 4A, 5, 6 and 8 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

Table 4

EU	Monitoring And Testing Requirements
1	1. In accordance with X239067-A1, the Permittee shall within five (5) years of the date of the initial compliance stack test, but no later than November 19, 2018, and every five (5) years thereafter, conduct performance and emission testing to determine the operating temperature of the RTO necessary to maintain a VOC destruction efficiency of 99% or better and to verify compliance with the provisions of this Operating Permit and applicable federal requirements.
	2. In accordance with X239067-A1, the Permittee shall within ten (10) years of the date of the initial compliance stack test, but no later than November 19, 2023, and every ten (10) years thereafter, conduct performance testing to determine the capture efficiency of the control system, including the wet and dry side of the capture system and to verify compliance with the provisions of this Operating Permit and applicable federal requirements. If the capture system is operating with an efficiency of less than 87.5 %, then the Permittee shall conduct an evaluation of the system to determine what may have caused the decrease in efficiency. The Permittee shall submit a written capture efficiency evaluation with test results to MassDEP within 60 days of the test.
	3. In accordance with X239067-A1, the Permittee shall accurately operate a device to continually measure RTO main blower fan frequency output (speed) in Hertz (Hz).
	4. In accordance with X239067-A1, the Permittee shall operate a device to continually measure the pressure differential at the RTO. The pressure differential magnehelic gauge shall be calibrated in or replaced as identified in the SOMP stored on site.
	5. In accordance with X239067-A1, the Permittee shall continuously monitor the temperature of the RTO with accurately operating thermocouples located in the central oxidizer chamber. The thermocouples shall be calibrated, operated, maintained or replaced annually as identified in the SOMP stored on site.
	6. In accordance with X239067-A1, the Permittee shall equip the RTO with operating low and high temperature alarms to alert employees when temperatures are outside of the operating zone necessary to achieve a minimum of 99% VOC destruction efficiency, as determined by the most recent compliance test. The make, model, and manufacturer's operating recommendations for the RTO temperature alarm shall be contained within a SOMP stored on site.
	7. In accordance with X239067-A1, the Permittee shall operate a Lower Explosive Limit (LEL) monitor(s) that continually monitors pentane concentrations within the aging room. The LEL shall alert employees with an audible and visual alarm when pentane emissions are outside of safe conditions. The make, model and operating literature for this monitor shall be contained within a SOMP for this device that is located on site.
	8. In accordance with X239067-A1, the Permittee shall continuously monitor the negative pressure within the aging room with a magnehelic pressure differential gauge. Personnel shall verify that the gauge reads negative 0.005 once per shift and sign the negative pressure verification log book. The Permittee shall respond to an increasing pressure to determine the cause of the increase. The result of the assessment and any action taken shall be recorded in a maintenance and malfunction log book. The make, model and operating literature for this monitor shall be contained within the SOMP for the capture and control systems stored on site. The Permittee shall calibrate or replace the magnehelic annually.

Table 4	
EU	**Monitoring And Testing Requirements**
1-3	9. In accordance with X239067-A1, the Permittee shall within ten (10) years of the date of the initial compliance stack test, but no later than November 19, 2023, and every ten (10) years thereafter, conduct bead analysis on every bead type (i.e. low, medium and high range) at 15 minutes after molding, at the end of 48 hours of storage and at the end of 4 weeks of storage. The bead analysis shall be conducted concurrently with the capture efficiency test.
4-5	10. In accordance with 310 CMR 7.04(4)(a), the Permittee shall inspect and maintain the boilers in accordance with the manufacturer's recommendations and test for efficient operation at least once in each calendar year. The result of said inspection, maintenance, and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the boilers.
Facility -wide	11. In accordance with 310 CMR 7.12, the Permittee shall monitor all operations to ensure that sufficient information is available to comply with 310 CMR 7.12 -Source Registration.
	12. The Permittee shall monitor all operations to ensure that sufficient information is available to comply with 310 CMR 7.00: Appendix C.
	13. The Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13.
	14. In accordance with 310 CMR 7.71(1) and Appendix C(9), the Permittee shall establish and maintain data systems or record keeping practices (e.g. fuel use records, SF_6 usage documentation, Continuous Emissions Monitoring System) for greenhouse gas emissions to ensure compliance with the reporting provisions of M.G.L. c. 21N§ 2, the Climate Protection and Green Economy Act, Acts of 2008, c. 298, § 6. (State only requirement)

Table 4 Key*:*

% = percent
CMR = Code of Massachusetts Regulation
EU = emission unit
MassDEP = Massachusetts Department of Environmental Protection
RTO = regenerative thermal oxidizer
SF_6 = Sulfur hexafluoride
SOMP = standard operating and maintenance plan
VOC = Volatile Organic Compounds

Table 4A			
Compliance Assurance Monitoring 40 CFR 64 – RTO			
Indicator	Chamber temperature	Fan differential pressure	Main blower fan frequency
Measurement Approach	The chamber temperature is monitored with thermocouples	Differential pressure gauge	Frequency (Hz) monitor
Indicator Range	RTO operates at an hourly average temperature reading of 1500^0F. An excursion is a low temperature of 1475^0 F and a high temperature of 1900^0 F. Low and high temperature audible and visual alarms are activated alerting molding and expansion operators to initiate controlled and safe production shutdown.	An excursion is a pressure reading greater or equal to 17 inches water column to determine the resistance to flow.	An increasing trend resulting in a value greater than 40Hz fan speed.
Data representativeness	Two thermocouples are located in the RTO central chamber. The minimum tolerance of the thermocouples is 4^0F. The digital data logger records temperature to 0.1 ^{0}F		A frequency monitor with a range of 0-60 Hz has a 0.5 Hz tolerance
QA/QC Practices and Criteria	Two thermocouples provide redundancy	If action point value is reached (17 inches water), an investigation of the pressure increase shall be conducted	If action point value is reached (> 40 Hz), an investigation of the fan speed increase shall be conducted
Monitoring frequency	Continuous	Continuous	Continuous
Data Collection Procedure	Value recorded continuously by digital data logger. Alarms are recorded manually in a log book.	Value recorded once per 24 hours on a log sheet	Value recorded once per 24 hours on a log sheet
Averaging period	Hourly	NA	NA

Table 4A Key

^{0}F = degrees Fahrenheit
> = greater than
< = less than
Hz = hertz
CFR = Code Of Federal Regulations
NA = Not Applicable
RTO = Regenerative Thermal Oxidizer

Table 4B		
Compliance Assurance Monitoring 40 CFR 64-VOC Emissions Capture		
	"Dry-side" VOC capture	"Wet-side" VOC capture
Indicator	Maintaining negative pressure in the pre-puff aging room ensures capture of VOC associated with the bead transfer to the molding machines	The vacuum system of each molding machine collects VOC released during molding and discharges to the" wet side" collection system. The transfer blower maintains negative pressure and ensures VOC capture from the molding machines.
Measurement Approach	The "dry side" negative pressure is monitored with a magnehelic differential pressure gauge	The "wet side" negative pressure is monitored with a magnehelic differential pressure gauge.
Indicator Range	An excursion is a pressure reading of less than negative (-) 0.005 inches water	An excursion is a pressure reading of less than negative (-) 0.005 inches water.
Data representativeness	The magnehelic differential pressure gauge is located on the outside wall of the aging room. The gauge has a resolution of 0.005 inches water	The magnehelic differential pressure gauge is located near the carbon system. The gauge has a resolution of 0.005 inches water
QA/QC Practices and Criteria	Pressure gauge is calibrated or replaced annually	Pressure gauge is calibrated or replaced annually
Monitoring Frequency	once per shift	once per shift
Data Collection Procedure	Value recorded once per shift on a log sheet	Value recorded once per shift on a log sheet
Averaging period	NA	NA

Table 4B Key

CFR = Code Of Federal Regulations NA = Not Applicable

Table 5	
EU	**Record Keeping Requirements**
1	1. In accordance with X239067-A1, the Permittee shall continuously record the temperature of the RTO. The data recorder shall properly indicate temperature, time, and date. The make, model and operating literature for the temperature monitor and recorder shall be contained within the accurate standard operating and maintenance procedure ("SOMP") for the control system and stored near the RTO. The Permittee shall maintain digital records of the RTO combustion chamber temperature produced by the system data-logger. Data recorded by the data-logger shall be downloaded, at minimum on a quarterly basis, into a spread sheet form.
	2. In accordance with X239067-A1, the Permittee shall maintain an accurate SOMP for each EU, the RTO, the capture and control systems and auxiliary monitoring equipment such as the temperature, variable frequency drive indicator and pressure differential monitors on site that is accessible to Facility personnel. It shall be revised as needed and the most up-to-date SOMP shall remain at or near the equipment at all times.
	3. In accordance with X239067-A1, the Permittee shall record the output frequency of the fan serving the RTO in a logbook once every 24 hours. The Permittee shall respond to an increasing motor frequency of 40 Hz or greater to determine the cause of the increase. The result of the assessment and the date and time and each action taken shall be recorded in a maintenance and malfunction log book.
	4. In accordance with X239067-A1, the Permittee shall record the pressure differential at the RTO once every 24 hours in a logbook maintained at or near the RTO. The Permittee shall also respond to any pressure ~~of~~ equal to or greater 17 inches w.c. to determine the cause of the resistance to flow. The result of the assessment and any action taken shall be recorded in a maintenance and malfunction log book.
	5. In accordance with X239067-A1, the Permittee shall record the negative magnehelic differential pressure gauge reading serving the "dry side" and "wet side" once per shift. The Permittee shall respond to any excursion of the pressure to determine the cause. The Permittee shall document excursions, calibrations, maintenance, replacements and repairs of the pressure gauge in a maintenance and malfunction log book.
	6. In accordance with X239067-A1, the Permittee shall maintain a repair and maintenance manual on site that documents any downtime or repairs conducted on the RTO and/ or capture system, the items inspected, and the maintenance conducted. This manual shall be dated and signed by the personnel conducting the work.
	7. In accordance with 310 CMR 7.00: Appendix C(10), the Permittee shall monitor and maintain records on site when the aging room is allowed to bypass the RTO and allow pentane emissions to be exhausted through the bypass stack.
1-3	8. In accordance with X239067-A1, the Permittee shall maintain, on site, the daily records, documents and supporting evidence that the Facility complies with the 2.4 pounds VOC per daily average per 100 pounds of EPS beads. Documents shall include but are not limited to daily bead throughput, pentane content of bead, capture efficiencies, destruction efficiencies of control equipment, and mass balance calculations.
	9. In accordance with X239067-A1, the Permittee shall ensure that a Certificate of Analysis ("COA") from the bead manufacturer accompanies each bead lot shipment received by the Permittee.
	10. In accordance with X239067-A1, the Permittee shall maintian the COA for each bead shipment on site for at least 5 years.
	11. In accordance with X239067-A1, the Permittee shall maintain a copy of any emission stack tests and bead study results on site for at least 5 years.

Table 5	
EU	**Record Keeping Requirements**
1-3	12. In accordance with X239067-A1, the Permittee shall adjust all emission calculations if stack test and bead study results indicate that the previous assumptions about capture efficiency, destruction efficiency, and/or pentane content in the bead/product were inaccurate.
	13. In accordance with X239067-A1, the Permittee shall maintain a record of the quantity of beads and the bead pentane content to demonstrate compliance with emission limits and restriction described in Table 3.
	14. In accordance with X239067-A1, the Permittee shall maintain a spreadsheet that calculates, and documents that VOC emissions comply with Table 3 of this Operating Permit. The spreadsheet shall accurately calculate the following : • Daily average rates[1] of pentane emissions from manufacturing and post manufacturing processes **and** from manufacturing through long term storage. • Calendar monthly rate of pentane emissions from the manufacturing through long term storage. • 12 month rolling rate of pentane emissions from the manufacturing through long term storage. • The spread sheet shall follow the guidance given in Attachment A, VOC/Pentane Emission Daily Calculations, of Plan Approval X239067-A1.
	15. In accordance with X239067-A1, the Permittee shall calculate VOC /pentane emissions on a daily basis by identifying the pentane content of the raw bead and the bead throughput (i.e. production rate) for each lot processed and then using a mass balance equation (see Attachment A of X239067-A1).
4	16. In accordance with 40 CFR 60.48c(g)(2), the Permittee shall record and maintain records of the amount of fuel combusted during each calendar month.
Facility Wide	17. In accordance with X239067-A1, the Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and short and long term emission limits contained in Table 3 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/dep/air/approvals/aqforms.htm#report .
	18. In accordance with X239067-A1, the Permittee shall maintain records of monitoring and testing as required by Table 4.
	19. In accordance with 310 CMR 7.00: Appendix C(10), the Permittee shall maintain a copy of this Operating Permit, and underlying Application approved herein on-site.
	20. In accordance with X239067-A1, the Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	21. In accordance with X239067-A1, the Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and PCD and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation, quantity of excess emissions associated with the malfunction and when MassDEP was notified.
	22. In accordance with X239067-A1, the Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12, Source Registration.

Table 5	
EU	**Record Keeping Requirements**
Facility Wide	23. In accordance with 310 CMR 7.00: Appendix C(10), the Permittee shall maintain records required by this Operating Permit on-site for a minimum of five (5) years.
	24. In accordance with 310 CMR 7.00: Appendix C(10), the Permittee shall make records required by this Operating Permit available to MassDEP and USEPA personnel within 30 days of request.
	25. In accordance with 310 CMR 7.71 (6) (b) and (c), the Permittee shall keep on site at the Facility documents of the methodology and data used to quantify emissions for a period of 5 years from the date the document is created. The Permittee shall make these documents available to MassDEP upon request. (State only requirement)

Table 5 Key

COA= Certificate of Analysis
CMR= Code of Massachusetts Regulations
EU =Emission Unit
Hz = hertz
MassDEP= Mass Department of Environmental Protection
PCD= Pollution Control Device
RTO = regenerative thermal oxidizer
SOMP= Standard Operating Maintenance Procedure
USEPA= United States Environmental Protections Agency
VOC= Volatile Organic Compounds
w.c. = water column

Table 5 footnote

1. Daily average rate = defined in the Consent Decree as a Continuous 24-hour period commencing at 7 a.m.

Table 6	
EU	**Reporting Requirements**
1	1. In accordance with X239067-A1, the Permittee shall submit a written pre-test draft protocol to MassDEP for written approval at least 90 days prior to the Facility conducting compliance testing of the VOC capture and control system. It shall contain all testing, monitoring, sampling, and analytical procedures for the test as required by Appendix I [1] of the CD[2]. The Permittee shall submit the pre-test draft protocol to Central Regional Office of MassDEP, 8 New Bond Street, Worcester, MA 01606. Attention: BAW Permit Chief or by email to:Roseanna.stanley@state.ma.us **and** EPA, Air Technical Unit attn: Air Compliance Clerk. Air Technical Unit, US Environmental Protection Agency - Region 1, 5 Post Office Square, Suite 100, Mail code OES04-2, Boston, MA 02109.
	2. In accordance with X239067-A1, if EPA or MassDEP comment on the draft pre-test protocol or any revised protocol, the Permittee shall incorporate those comments and re-submit a revised protocol to EPA and MassDEP within 15 days of receiving the comments.
	3. In accordance with X239067-A1, the Permittee shall notify MassDEP and the EPA at least 60 days prior to the scheduled testing of the RTO. The compliance testing date(s) is subject to the approval and presence of both the MassDEP and EPA.
	4. In accordance with X239067-A1, the Permittee shall submit an emission stack test final results report to MassDEP and EPA, within 60 days after emission testing, as defined in Table 4. The test reports shall contain all information as required to determine compliance with emission limits and restrictions identified in Table 3 and in accordance with Appendix I[1] of the CD[2].

Table 6

EU	Reporting Requirements
1	5. In accordance with X239067-A1, the Permittee shall notify MassDEP in writing of the pending installation of replacement, modified or new molding equipment at least 30 days prior to its installation. The notification shall identify the new equipment's make and model, and a diagram and schematic of how it will be connected to existing VOC capture and control systems.
1-3	6. In accordance with X239067-A1, the Permittee shall submit to MassDEP and EPA for approval a written pre-test draft protocol for the bead testing analysis listed in Table 4.
	7. In accordance with X239067-A1, the Permittee shall submit the bead analysis final results report to MassDEP and EPA, within 60 days after bead testing, as defined in Table 4.
	8. In accordance with X239067-A1, the Permittee shall notify MassDEP and EPA in writing if compliance testing has resulted in adjustments to assumptions regarding capture and destruction efficiencies or residuals of pentane found in the EPS bead or product which impact the calculations to determine emissions. The Permittee shall submit a written report with all adjusted calculations and assumptions within 30 days of the actual testing. Additionally, the Permittee shall submit a revised calculation spread sheet that incorporates any new information including revised daily, monthly and annual emission rates, capture and control efficiencies and fugitive emissions.
Facility Wide	9. In accordance with X239067-A1, the Permittee shall submit quarterly VOC emission reports to MassDEP that demonstrate compliance with emission limits listed in Table 3 to Central Regional Office of MassDEP, 8 New Bond Street, Worcester, MA 01606, to the attention of: BAW Permit Chief or by email: Roseanna.Stanley@massmail.state.ma.us **and** EPA, Air Technical Unit, attn: Air Compliance Clerk. Air Technical Unit, US Environmental Protection Agency - Region 1, 5 Post Office Square, Suite 100, Mail code OES04-2, Boston, MA 02109.
	10. In accordance with 310 CMR 7.00: Appendix C (10)(h), the Permittee shall submit to MassDEP all information required by this Operating Permit over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	11. In accordance with X239067-A1, the Permittee shall notify the Central Regional Office of MassDEP, BAW Permit Chief by telephone: (508) 792-7650, or email: Roseanna.Stanley@massmail.state.ma.us or fax: (508)792-7621 as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 3 requirements. A written report shall be submitted to same as above at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	12. In accordance with X239067-A1, the Permittee shall report annually to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2) (e), 7.03, 7.26, etc.), which did not require an Air Quality Plan Approval.
	13. In accordance with 310 CMR 7.00: Appendix C (10)(a), the Permittee shall provide a copy to MassDEP of any record required to be maintained by this Operating Permit within 30 days from MassDEP's request.
	14. In accordance with 310 CMR 7.00: Appendix C(10)(c), the Permittee shall report a summary of all monitoring data and related supporting information to MassDEP at least every six months (January 30 and July 30 of each calendar year).
	15. In accordance with General Condition 10 of this Operating Permit, the Permittee shall submit Annual Compliance reports to MassDEP and EPA by January 30 of each year.
	16. In accordance with 310 CMR 7.71(5) the Permittee shall electronically submit and certify by April 15th of each year a greenhouse gas emissions report to MassDEP (State only requirement).

Table 6 Key

BAW = Bureau of Air and Waste	MassDEP= Massachusetts Department of Environmental Protection
CD = Federal Consent Decree	PCD = Pollution Control Device
CMR = Code of Massachusetts Regulations	RTO = regenerative thermal oxidizer
EPA = Environmental Protection Agency	VOC = Volatile Organic Compound
EU = Emission Unit	@ = at

Table 6 Notes:

1. Appendix I of the Consent Decree- Requirements for Air Source Emission Testing
2. Federal Consent Decree for United States v. Polyfoam Corp , September 15, 2011

C. GENERAL APPLICABLE REQUIREMENTS

The Permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et. seq., when subject.

D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The Permittee is currently not subject to the following requirements:

Table 7

Regulation	Reason
310 CMR 7.07	The Permittee does not conduct Open Burning
310 CMR 7.16	The Permittee does not employ the threshold number of 250 employees

5. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to and shall comply with the following special terms and conditions that are not contained in Table 3, 4, 5, and 6:

Table 8

EU	Special Terms and Conditions
1	1. In accordance with X239067-A1, the Permittee shall post the Standard Operating and Maintenance Procedures ("SOMP") as approved by the MassDEP, at a location readily accessible to the RTO operator.

Table 8

EU	Special Terms and Conditions
1	2. In accordance with X239067-A1, the Permittee shall vent all manufacturing emissions from the pre-expansion, aging, and molding of EPS beads and EPS foam products to the RTO in a manner that ensures compliance with the VOC limit or operational restrictions set forth in Table 3. At no time shall pre expansion, aging or molding equipment be disconnected from any ductwork or other VOC capture equipment that vents VOC emissions to the RTO any time that such equipment are being used.
	3. In accordance with X239067-A1, the Permittee shall not allow an untreated process stream to bypass the RTO at any time.
	4. In accordance with X239067-A1, the Permittee shall ensure that the air streams used to transfer pre-puff bead to the molding machines and the air used to purge bead transfer lines at the molding machines is captured by the VOC capture and control system.
	5. In accordance with X239067-A1, the Permittee shall ensure that the total VOC capture efficiency of EU1 shall be equal to or greater than 87.5% or as determined by the most recent approved compliance test on an average hourly basis while EPS beads are being processed. The emission calculations shall account for any changes to the capture efficiency.
	6. In accordance with X239067-A1, the Permittee shall ensure that properly operating magnehelic pressure gauges serving the "dry-side" and "wet-side" of the VOC capture system shall be calibrated or replaced annually. Pressure readings shall be taken once per shift and maintained on a log sheet.
	7. In accordance with X239067-A1, the Permittee shall maintain negative pressure at all times at the pre-puff aging room ("dry side"), molding machine hoods ("wet-side") and /or other equipment necessary to capture and vent Polyfoam's manufacturing emissions to the RTO for VOC destruction.
	8. In accordance with X239067-A1, the Permittee shall ensure that all aging of pre-puff material shall occur in the aging room.
	9. In accordance with X239067-A1, whenever there is 500 pounds or more of pre-puff material in the aging room, the Permittee shall operate the RTO, as specified in Plan Approval X239067-A1.
	10. In accordance with X239067-A1, the Permittee shall ensure that the RTO combustion chamber operates at a minimum of 1499.7 ^{O}F (on an hourly average basis) or at the temperature necessary to assure a minimum of 99% VOC destruction efficiency, as determined by the most recent EPA approved compliance test.
	11. In accordance with X239067-A1, the Permittee shall ensure that the VOC laden gas stream has a minimum residence time of 0.5 seconds in the RTO.
	12. In accordance with X239067-A1, the Permittee shall ensure that the RTO is equipped with properly operating puff capture.
	13. In accordance with X239067-A1, the Permittee shall ensure that the RTO is equipped with a noise abatement enclosure.
	14. In accordance with X239067-A1, the Permittee shall ensure that the RTO is equipped with a properly operating "carbon flywheel" on the wet stream.
	15. In accordance with X239067-A1, the Permittee shall ensure that the RTO is equipped with a properly operating electronic interlock system.
	16. In accordance with X239067-A1, the Permittee shall ensure that production begins only when the RTO is at and maintaining the minimum combustion temperature to assure 99% VOC destruction efficiency. The electronic interlock system shall include audible and visual alarms to alert operators that the system is not ready. Start-up shall be conducted in accordance with the SOP,

Table 8	
EU	**Special Terms and Conditions**
1	which shall not allow production until the RTO is at 1499.7^0 F. The SOP shall require that production operations be safely shut-down if the hourly average RTO operating temperature falls below the minimum temperature of 1499.7 ^{0}F.
	17. In accordance with X239067-A1, the Permittee shall only allow a maximum air flow of $\leq$ 6000 scfm to the RTO. The Permittee has demonstrated that the Hertz meter reading together with the magnehelic reading correlates to air flow in scfm. Documentation of this correlation shall be maintained on site and be readily available upon request by MassDEP or EPA.
	18. In accordance with X239067-A1, the Permittee shall ensure that replacement and new molding machines shall be equipped with an equivalent or better VOC vacuum and emission capture and control system as the replaced molding equipment.
	19. In accordance with X239067-A1, the Permittee shall ensure that at no time shall any pre-expansion or molding machine be disconnected from any ductwork or other VOC capture equipment that vents VOC emissions from the machines to the RTO at any time while such machines are being used.
	20. In accordance with X239067-A1, the Permittee shall ensure that at no time shall any ductwork or other VOC capture equipment from the aging room that vents VOC emissions from the machines to the RTO be disconnected while there is $\geq$ 500 pounds EPS material in the aging room.
6	22. In accordance with 40 CFR 60.4233(a), as the Permittee owns and operates a stationary SI ICE with a maximum engine power less than or equal to 19KW (25HP) manufactured on or after July 1, 2008, the Permittee shall comply with the emission standards in §60.4231(a).
	23. In accordance with 40 CFR 60.4234, the Permittee shall operate and maintain a stationary SI ICE that achieves the emission standards as required in 40 CFR 60.4233 over the entire life of the engine.
	24. In accordance with 40 CFR 60.4243(a)(1), the Permittee shall operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacture's emission related written instructions; the Permittee shall keep records of conducted maintenance to demonstrate compliance, but no performance testing is required…. The Permittee shall also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the Permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance
	25. In accordance with 40 CFR 60.4243, the Permittee shall operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If the Permittee does not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (a) There is no time limit on the use of emergency stationary ICE in emergency situations. (b) The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraph (d)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2). (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the

Table 8	
EU	**Special Terms and Conditions**
6	manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
	26. In accordance with 40 CFR 60.4243(d)(3), the Permittee shall comply with the following: Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of section 60.4243(d). Except as provided in paragraph (d)(3)(i) of section 60.4243(d) , the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator; (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. (iv) The power is provided only to the facility itself or to support the local transmission and distribution system. (v) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
	27. In accordance with 40 CFR 60.4245(a)(1-3), the Permittee shall keep the following records: (a) All notifications submitted to comply this subpart and documentation supporting any notification, (b) Maintenance conducted on the engine, and (c) If the stationary internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90,1048, 1054 and 1060 , as applicable .
	30. In accordance with 40 CFR 60.4246, the Permittee shall comply with Table 3 of the General Provisions to Subpart JJJJ of Part 60.
Facility-wide	31. In accordance with X239067-A1, the Permittee shall ensure that all efforts shall be made to minimize VOC emissions from all areas of the Facility including all storage and pentane content of the incoming bead.

Table 8 Key

CFR = Code of Federal Regulations
EPA = Environmental Protection Agency
EPS = expandable polystyrene
EU = Emission Unit
HP = Horsepower
Hz = hertz
ICE = internal combustion engine
Kw = kilowatts
MassDEP = Massachusetts Department of Environmental Protection
PCD = Pollution Control Device
RTO = Regenerative Thermal Oxidizer
scfm = standard cubic feet per minute
SI = spark ignition
SO_2 = Sulfur Dioxide
SOMP = Standard Operating and Maintenance Procedure
SOP = Standard Operating Procedure
VOC = volatile organic compound
^{0}F = degrees Fahrenheit
% = percent
$\geq$ = greater than or equal to
$\leq$ = less than or equal to

6. ALTERNATIVE OPERATING SCENARIOS

The Permittee did not request alternative operating scenarios in its Operating Permit application.

7. EMISSIONS TRADING

A. INTRA-FACILITY EMISSION TRADING

The Permittee did not request intra-facility emissions trading in its Operating Permit application.

B. INTER-FACILITY EMISSION TRADING

The Permittee did not request inter-facility emissions trading in its Operating Permit application.

8. COMPLIANCE SCHEDULE

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the Permit term.

GENERAL CONDITIONS FOR OPERATING PERMIT

9. FEES

The Permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

10. COMPLIANCE CERTIFICATION

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via the MassDEP's web site, http://www.mass.gov/dep/air/approvals/aqforms.htm#op.

A. Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the Facility is in compliance with the requirements of this Operating Permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Air Compliance Clerk, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

1) the terms and conditions of the Permit that are the basis of the certification;
2) the current compliance status and whether compliance was continuous or intermittent during the reporting period;
3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
4) any additional information required by the MassDEP to determine the compliance status of the source.

B. Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the Facility is in compliance with the requirements of this Permit. The report shall be postmarked or delivered by January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

1) the terms and conditions of the Permit that are the basis of the certification;
2) the current compliance status during the reporting period;
3) the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
4) whether there were any deviations during the reporting period;
5) if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
6) whether deviations in the reporting period were previously reported;
7) if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
8) if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
9) any additional information required by the MassDEP to determine the compliance status of the source.

11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for Permit termination or revocation, or for denial of an Operating Permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

12. PERMIT SHIELD

A. This Facility has a permit shield provided that it operates in compliance with the terms and conditions of this Permit. Compliance with the terms and conditions of this Permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the Permittee's application and as identified in this Permit.

Where there is a conflict between the terms and conditions of this Permit and any earlier approval or Permit, the terms and conditions of this Permit control.

B. The MassDEP has determined that the Permittee is not currently subject to the requirements listed in Section 4, Table 7.

C. Nothing in this Permit shall alter or affect the following:

1) the liability of the source for any violation of applicable requirements prior to or at the time of Permit issuance.

2) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or

3) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this Permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

14. PERMIT TERM

This Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date 5 years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the Facility's emission units, control equipment or associated equipment covered by this Permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

15. PERMIT RENEWAL

Upon the MassDEP’s receipt of a complete and timely application for renewal, this Facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the Operating Permit renewal application prior to this Permit's expiration date, this Permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

16. REOPENING FOR CAUSE

This Permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the Facility may request that the MassDEP terminate the facility's Operating Permit for cause. The MassDEP will reopen and amend this Permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the Permittee for an Operating Permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any Operating Permit condition.

17. DUTY TO PROVIDE INFORMATION

Upon the MassDEP's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the MassDEP copies of records that the Permittee is required to retain by this Permit.

18. DUTY TO SUPPLEMENT

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The Permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

19. TRANSFER OF OWNERSHIP OR OPERATION

This Permit is not transferable by the Permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the Permit is necessary and provided that a written agreement containing a specific date for transfer of Permit responsibility, coverage and liability between current and new Permittee, has been submitted to the MassDEP.

20. PROPERTY RIGHTS

This Permit does not convey any property rights of any sort, or any exclusive privilege.

21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

A. enter upon the Permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;

B. have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

C. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

D. Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the Operating Permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

22. PERMIT AVAILABILITY

The Permittee shall have available at the Facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the Operating Permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

23. SEVERABILITY CLAUSE

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

24. EMERGENCY CONDITIONS

The Permittee shall be shielded from enforcement action brought for noncompliance with technology based[1] emission limitations specified in this Permit as a result of an emergency[2]. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

A. an emergency occurred and that the Permittee can identify the cause(s) of the emergency;

B. the permitted Facility was at the time being properly operated;

C. during the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and

D. the Permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this Permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6 of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Air and Waste the following deviations from permit requirements, by telephone, by fax or by electronic mail (e-mail), within three (3) days of discovery of such deviation:

A. Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.

B. Exceedances of parameter limits established by your Operating Permit or other approvals, where the

---

[1] Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

[2] An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

parameter limit is identified by the Permit or approval as surrogate for an emission limit.

C. Exceedances of Permit operational limitations directly correlated to excess emissions.

D. Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.

E. Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Air and Waste Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, http://www.mass.gov/dep/air/approvals/aqforms.htm#op .
This report shall include the deviation, including those attributable to upset conditions as defined in the Permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone, fax or electronic mail (e-mail) within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Air and Waste within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

26. OPERATIONAL FLEXIBILITY

The Permittee is allowed to make changes at the Facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the Permit and in compliance with all applicable requirements provided the Permittee gives the EPA and the MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's Permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

A. Administrative Amendments - The Permittee may make changes at the Facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).

B. Minor Modifications - The Permittee may make changes at the Facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).

C. Significant Modifications - The Permittee may make changes at the Facility which are considered

significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).

D. No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this Operating Permit. A revision to the Permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an Operating Permit revision under any other applicable requirement.

28. OZONE DEPLETING SUBSTANCES

This section contains air pollution control requirements that are applicable to this Facility, and the United States Environmental Protection Agency enforces these requirements.

A. The Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

1) All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.

2) The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.

3) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.

4) No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.

B. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:

1) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.

2) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.

3) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

4) Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.

5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.

6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

C. If the Permittee manufactures, transforms, imports or exports a class I or class II substance, the Permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".

D. If the Permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners". The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

E. The Permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

29. PREVENTION OF ACCIDENTAL RELEASES

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

Your Facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.

APPEAL CONDITIONS FOR OPERATING PERMIT

This Permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this Permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the

case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a Permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars ($100.00) must be mailed to:

The Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.